



# San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT



**JAN 20 2012**

Gerardo C. Rios, Chief  
Permits Office  
Air Division  
U.S. EPA - Region IX  
75 Hawthorne St  
San Francisco, CA 94105

Re: **Notice of Minor Title V Permit Modification**  
**District Facility # S-2234**  
**Project # 1113927**

Dear Mr. Rios:

Enclosed for you to review is an application for minor Title V permit modification for the facility identified above. Occidental of Elk Hills Inc is proposing a Title V minor permit modification to incorporate the recently issued Authorities to Construct (ATCs) S-2234-4-6, '-195-0, and '-215-0 into the Title V operating permit. The ATCs authorize correcting the equipment description of a natural gas loading rack (ATC S-2234-4-6), a methanol transfer operation (ATC S-2234-195-0), and a 1680 hp natural gas-fired IC engine powering a gas compressor (ATC S-2234-215-0).

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued Authorities to Construct (ATCs) S-2234-4-6, '-195-0, and '-215-0, emission increases, application, and previous Title V permit. Please submit your written comments on this project within the 45-day comment period that begins on the date you receive this letter.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Leonard Scandura at (661) 392-5500.

Sincerely,

David Warner  
Director of Permit Services

Enclosures

Seyed Sadredin  
Executive Director/Air Pollution Control Officer

Northern Region  
4800 Enterprise Way  
Modesto, CA 95356-8718  
Tel: (209) 557-6400 FAX: (209) 557-6475

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# San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT



**JAN 20 2012**

Dennis Champion  
Occidental of Elk Hills Inc  
10800 Stockdale Hwy  
Bakersfield, CA 93311

**Re: Notice of Minor Title V Permit Modification  
District Facility # S-2234  
Project # 1113927**

Dear Mr. Champion:

Enclosed is the District's analysis of your application for minor Title V permit modification for the facility identified above. You proposed a Title V minor permit modification to incorporate recently issued Authorities to Construct (ATCs) S-2234-4-6, '-195-0, and '-215-0 into the Title V operating permit. The ATCs authorize correcting the equipment description of a natural gas loading rack (ATC S-2234-4-6), a methanol transfer operation (ATC S-2234-195-0), and a 1680 hp natural gas-fired IC engine powering a gas compressor (ATC S-2234-215-0).

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued Authorities to Construct (ATCs) S-2234-4-6, '-195-0, and '-215-0, emission increases, application, and previous Title V permit. This project will be subject to a 45-day EPA commenting period prior to the District taking final action.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Leonard Scandura at (661) 392-5500.

Sincerely,

David Warner  
Director of Permit Services

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# TITLE V APPLICATION REVIEW

Minor Modification  
Project #: S-1113927

Engineer: Richard Edgehill  
Date: October 20, 2011

Facility Number: S-2234  
Facility Name: Occidental of Elk Hills Inc  
Mailing Address: 10800 Stockdale Hwy  
Bakersfield, CA 93311

RWK

10-28-11

Contact Name: Dennis Champion  
Phone: (661) 412-5214  
Title: Environmental Engineer  
Responsible Official: Mike Glavin, Environmental Team Lead  
Lead Engineer: Richard Karrs

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## I. PROPOSAL

Occidental of Elk Hills Inc (OEHI) is proposing a Title V minor permit modification to incorporate the recently issued Authorities to Construct (ATC) S-2234-4-6, '-195-0, and '-215-0. The ATCs authorize correcting the equipment description of a natural gas loading rack (ATC S-2234-4-6), a methanol transfer operation (ATC S-2234-195-0), and a 1680 hp natural gas-fired IC engine powering a gas compressor (ATC S-2234-215-0). The purpose of this evaluation is to identify all applicable requirements, determine if the facility will comply with the applicable requirements and to provide the legal and factual basis for the proposed revisions.

## II. FACILITY LOCATION

ATC	
S-2234-4-6	NE/4, Section 35, 30S/R22E
S-2234-195-0	NE/4, Section 35, 30S/R22E
S-2234-215-0	Section 29, T30S, R23E (various -initial location)

## III. EQUIPMENT DESCRIPTION

**S-2234-4-8:** NATURAL GASOLINE, BUTANE, AND PROPANE LOADING RACK  
CONSISTING OF 7 LOADING ISLANDS, 7 LOADING STATIONS,

14 HOSES, 14 VAPOR RETURN LINES AND A VAPOR  
RECOVERY SYSTEM

**S-2234-195-1:** METHANOL UNLOADING, STORAGE, AND LOADING  
OPERATION CONSISTING OF A 430 BBL STORAGE VESSEL  
CONTROLLED WITH A GAS BLANKET SYSTEM, AND AN  
UNLOADING RACK, LOADING RACK, AND METHANOL  
INJECTION PUMPS

**S-2234-215-1:** 1,680 BHP NATURAL GAS-FIRED WAUKESHA MODEL  
L7044GSI IC ENGINE WITH NON-SELECTIVE CATALYTIC  
REDUCTION POWERING A GAS COMPRESSOR (R-43)  
OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN  
FACILITY S-2234

#### **IV. SCOPE OF EPA AND PUBLIC REVIEW**

This change to a Title V permit is considered to be a minor modification and, as such, requires no public review.

#### **V. APPLICABLE REQUIREMENTS**

District Rule 2520, Federally Mandated Operating Permits (Adopted June 21, 2001)

#### **VI. DESCRIPTION OF PROPOSED MODIFICATIONS**

ATC S-2234-4-6 authorized the following changes to the PTO S-2234-4-5 equipment description:

- Remove the "#2" from the loading rack description. The permits for the other loading rack at this facility have been cancelled; therefore this is the only loading rack at the facility and there is no need to label the loading rack.
- List natural gasoline, butane, and propane as fuels that will be transferred by the loading rack.
- Indicate that there are 7 islands, 7 loading stations, 14 hoses and 14 vapor return lines.

**PTO S-2234-4-5:** NATURAL GASOLINE LOADOUT #2 INCLUDING A LOADING  
RACK WITH VAPOR RECOVERY SYSTEM

**PTO S-2234-4-8:** NATURAL GASOLINE, BUTANE, AND PROPANE LOADING  
RACK CONSISTING OF 7 LOADING ISLANDS, 7 LOADING

STATIONS, 14 HOSES, 14 VAPOR RETURN LINES AND A  
VAPOR RECOVERY SYSTEM

A condition # comparison is provided in the table below.

Draft PTO S-2234-4-8	PTO S-2234-4-5	Comments
1	1	
2		VOC emissions from the vapor collection and control system shall be determined using 40CFR 60.503. "Test Methods and Procedures" and EPA Reference Methods 2A, 2B, 25A and 25B and ARB Method 432, or ARB Method 2-4. After an initial compliance determination, determinations shall be made whenever an inspection reveals conditions indicative of performance less effective than that during previous compliance determinations. [District Rule 4624, 6.2.2] Y - NEW ATC CONDITION INCLUDED
3	2	
	4	This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Y - REDUNDANT NOT INCLUDED
5-9	5-9	
10	15	
11		TVP shall be measured using Reid vapor pressure ASTM Method No. D-323-82 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100°F, TVP may be determined by Reid Vapor pressure at 100°F and ARB approved calculations. [District Rule 4624, 6.2.3] Y - NEW ATC CONDITION INCLUDED
12		TVP of crude oil with an API gravity less than 30° as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4624, 6.2.4] Y - NEW ATC CONDITION INCLUDED
13	10	
14-16	11-13	
17		The permittee shall maintain an inspection log containing at least the following: A) dates of leak and drainage inspections, B) leak determination method, C) findings, D) corrective action (date each leak or excess drainage condition repaired, reasons for any leak repair interval in excess of 15 days), and E) inspector name and signature. [District Rule 2520, 9.4.2] Y -NEW ATC CONDITION INCLUDED
18	17	
19		The loading rack's vapor collection and control system (VCCS) shall be tested annually to demonstrate the pressure in the delivery tanks being loaded complies with the requirements specified in this permit. Compliance shall be determined by calibrating and installing a liquid manometer, magnehelic device, or other instrument demonstrated to be equivalent, capable of measuring up to 500 mm water gauge pressure with a precision of + or - 2.5 mm water gauge, on the terminal's VCCS at a pressure tap as close as possible to the connection with the product tank truck. The highest instantaneous pressure measurement as well as all pressure measurements at 5 minute intervals during delivery vessel loading must be recorded. Every loading position must be tested at least once during the annual performance test. [District Rule 2520, 9.4.2] Y - NEW ATC CONDITION INCLUDED
20,21	18,19	

S-2234-195-1

Draft PTO S-2234-195-1 authorizes a new permit unit and includes all of the conditions on ATC S-2234-195-0 except the following which has been met by the application:

~~{1829} The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Y~~

The following two conditions were revised to reflect revised Rule 4624 (Section 4.1) which is now applicable to both loading and unloading operations (liquid transfer operations):

- ~~15. No more than 4,000 gallons of methanol may be loaded into tank trucks or trailers in any one day. [District Rule 4624] N~~
- ~~16. The operator shall maintain daily records of the quantity of liquid loaded into tank trucks or trailers, and the volume of liquid in each tank truck or trailer after each loading operation is completed. [District Rules 2201 and 4624] N~~
15. The combined volume of methanol loaded into tank trucks or trailers and unloaded into tanks shall not exceed 4,000 gallons in any one day. [District Rule 4624] N
16. The operator shall maintain daily records of the combined quantity of methanol loaded into tank trucks and/or trailers and unloaded into tanks after each loading and unloading operation is completed. [District Rules 2201 and 4624] N

S-2234-215-1

Draft PTO S-2234-215-1 authorizes a new permit unit and includes all of the conditions on ATC S-2234-215-0 except the following:

~~{1829} The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Y~~

~~Upon implementation of this Authority to Construct permit, Permit to Operate S-2234-189 shall be cancelled. [District Rule 2201] N~~

~~Source testing to measure natural gas combustion NOx, CO, and VOC emissions from this engine shall be conducted within 60 days of initial startup. [District Rules 2201 and 4702] N~~

ATC S-2234-189-0 has been canceled and startup source testing has been completed.

## VII. COMPLIANCE

In accordance with Rule 2520, 3.20, these modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;

2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
  - a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
  - b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
6. Do not seek to consolidate overlapping applicable requirements.

In accordance with Rule 2520, the application meets the procedural requirements of section 11.4 by including:

1. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
2. The source's suggested draft permit; and
3. Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used.

## **VIII. ATTACHMENTS**

- A. Current and Proposed Title V Operating Permits
- B. Authority to Construct
- C. Application

Attachment A  
Current and Proposed Title V Operating Permits

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-2234-4-8

**EXPIRATION DATE:** 10/31/2009

**SECTION:** NE35 **TOWNSHIP:** 30S **RANGE:** 23E

**EQUIPMENT DESCRIPTION:**

NATURAL GASOLINE, BUTANE, AND PROPANE LOADING RACK CONSISTING OF 7 LOADING ISLANDS, 7 LOADING STATIONS, 14 HOSES, 14 VAPOR RETURN LINES AND A VAPOR RECOVERY SYSTEM

## PERMIT UNIT REQUIREMENTS

1. Operation shall be equipped with two 15 hp product transfer pumps. [District NSR Rule] Federally Enforceable Through Title V Permit
2. VOC emissions from the vapor collection and control system shall be determined using 40CFR 60.503. "Test Methods and Procedures" and EPA Reference Methods 2A, 2B, 25A and 25B and ARB Method 432, or ARB Method 2-4. After an initial compliance determination, determinations shall be made whenever an inspection reveals conditions indicative of performance less effective than that during previous compliance determinations. [District Rule 4624, 6.2.2] Federally Enforceable Through Title V Permit
3. Loading rack shall incorporate vapor loss collection system. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Nitrogen purge system shall be a closed system such that all VOC's are displaced to the vapor control system via closed piping for reprocessing in S-2234-3. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The loading rack shall be equipped with bottom loading and a vapor collection and control system such that VOC emissions do not exceed 0.08 pounds per 1000 gallons of organic liquid with greatest vapor pressure loaded. [4624, 5.1.1 and Kern County Rule 413] Federally Enforceable Through Title V Permit
6. Vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and 6 inches water column vacuum. [District Rule 4624, 5.4] Federally Enforceable Through Title V Permit
7. All delivery tanks which previously contained organic liquids, including gasoline, with a TVP greater than 1.5 psia at loading conditions shall be filled only at Class 1 loading facilities using bottom loading equipment with a vapor collection and control system operating such that VOC emissions do not exceed 0.08 lb/1000 gallons loaded; or Class 2 loading facilities equipped with a system to control at least 95% of VOC displaced; and which operate so the delivery tank does not exceed 18 inches water column pressure nor 6 inches water column vacuum. [District Rule 4624, 5.5] Federally Enforceable Through Title V Permit
8. Loading and vapor collection and control equipment shall be designed, installed, maintained and operated such that there are no leaks or excess organic liquid drainage at disconnections. A leak shall be defined as the dripping of organic compounds at a rate of more than three drops per minute or the detection of organic compounds, in excess of 10,000 ppm as methane measured in accordance with EPA Method 21. Excess liquid drainage shall be defined as exceeding 10 mls per average of 3 consecutive disconnects. [District Rule 4624, 5.6 and Kern County Rule 413] Federally Enforceable Through Title V Permit
9. Construction, reconstruction (as defined in District Rule 4001, amended January 19, 1995), or expansion of any top loading facility shall not be allowed. [District Rule 4624, 5.7] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

10. Analysis of halogenated exempt compounds shall be by ARB Method 432. [District Rule 4624, 6.3.1] Federally Enforceable Through Title V Permit
11. TVP shall be measured using Reid vapor pressure ASTM Method No. D-323-82 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 deg F, TVP may be determined by Reid Vapor pressure at 100 deg F and ARB approved calculations. [District Rule 4624, 6.3.3] Federally Enforceable Through Title V Permit
12. TVP of crude oil with an API gravity less than 30ø as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4624, 6.3.4] Federally Enforceable Through Title V Permit
13. During the loading of organic liquids, the operator shall perform and record the results of monthly leak inspections of the loading and vapor collection equipment at each loading arm. Leak inspections shall be conducted using sight, sound, smell and instrument methods to detect leaks. Instrument detection shall be conducted using EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: A) Zero air (less than 10 ppm of hydrocarbon in air); and B) Mixture of methane and air at a concentration of about, but less than, 10,000 ppm methane. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. Corrective steps shall be taken at any time the operator observes excess drainage at disconnect. In addition, the operator shall perform and record the results of monthly drainage inspections at disconnect for each loading arm. If no excess drainage conditions are found during five consecutive monthly inspections, the drainage inspection frequency may be changed from monthly to quarterly. However, if one or more excess drainage condition is found during a quarterly inspection, the inspection frequency shall return to monthly. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. Drainage inspections shall be completed before 10:00 AM the day of inspection. Compliance shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one (1) minute of collection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
16. Each detected leak shall be repaired within 15 calendar days of detection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
17. The permittee shall maintain an inspection log containing at least the following: A) dates of leak and drainage inspections, B) leak determination method, C) findings, D) corrective action (date each leak or excess drainage condition repaired, reasons for any leak repair interval in excess of 15 days), and E) inspector name and signature. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
18. All records necessary to determine compliance with the VOC emission limit for this unit shall be maintained for a period of at least 5 years and shall include component counts and recognized emission factors for fugitive emission sources. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
19. The loading rack's vapor collection and control system (VCCS) shall be tested annually to demonstrate the pressure in the delivery tanks being loaded complies with the requirements specified in this permit. Compliance shall be determined by calibrating and installing a liquid manometer, magnehelic device, or other instrument demonstrated to be equivalent, capable of measuring up to 500 mm water gauge pressure with a precision of + or - 2.5 mm water gauge, on the terminal's VCCS at a pressure tap as close as possible to the connection with the product tank truck. The highest instantaneous pressure measurement as well as all pressure measurements at 5 minute intervals during delivery vessel loading must be recorded. Every loading position must be tested at least once during the annual performance test. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
20. Compliance with these permit conditions in the Title V permit shall be deemed compliance with the requirements of Kern County Rule 413. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

21. Compliance with these permit conditions in the Title V permit shall be deemed compliance with the following requirements: District Rule 4624 (as amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-2234-195-1

**EXPIRATION DATE:** 10/31/2016

**SECTION:** 35 **TOWNSHIP:** 30S **RANGE:** 23E

**EQUIPMENT DESCRIPTION:**

METHANOL UNLOADING, STORAGE, AND LOADING OPERATION CONSISTING OF A 430 BBL STORAGE VESSEL CONTROLLED WITH A GAS BLANKET SYSTEM, AND AN UNLOADING RACK, LOADING RACK, AND METHANOL INJECTION PUMPS:

## PERMIT UNIT REQUIREMENTS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Methanol received by the unloading operation shall be stored in the storage vessel until such time it is injected into the gas gathering system, or until such time it is loaded into tank trucks or trailers with a storage capacity of not less than 2,520 gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components shall not exceed 0.27 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. There shall be no leaks in excess of 10,000 ppmv from either fugitive components or the pressure relief valve on the tank trucks when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
5. The vapor space of the methanol storage vessel shall be vented to the gas gathering system. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
6. Any gauging or sampling device on the methanol storage vessel shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. The methanol loading and unloading racks shall be designed, installed, maintained, and operated such that there are no leaks or excess organic liquid drainage at disconnections. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Excess organic liquid drainage is defined as organic liquid drainage greater than 10 mL per disconnect. [District Rule 2201] Federally Enforceable Through Title V Permit
9. There shall be no more than 10 disconnects per day from loading and unloading operations combined. [District Rule 2201] Federally Enforceable Through Title V Permit
10. VOC emissions from disconnects shall not exceed 0.17 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Tank trucks or trailers receiving methanol from the loading rack shall be equipped with a pressure relief valve set to at least 35 psig positive pressure, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

12. Tank trucks or trailers receiving methanol from the loading rack shall not contain more than 1,600 gallons of methanol when a loading operation is complete. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The pressure relief valve on the tank trucks or trailers shall not vent during loading operations. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The combined volume of methanol loaded into tank trucks or trailers and unloaded into tanks shall not exceed 4,000 gallons in any one day. [District Rule 4624] Federally Enforceable Through Title V Permit
15. The operator shall maintain daily records of the quantity of methanol loaded into tank trucks and/or trailers and unloaded into tanks after each loading and unloading operation is completed. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
16. Permittee shall maintain with the permit accurate fugitive component counts and resulting emissions. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
17. {3246} All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

These terms and conditions are part of the Facility-wide Permit to Operate.

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-2234-215-1

**EXPIRATION DATE:** 10/31/2009

**SECTION:** 29 **TOWNSHIP:** 30S **RANGE:** 23E

**EQUIPMENT DESCRIPTION:**

1,680 BHP NATURAL GAS-FIRED WAUKESHA MODEL L7044GSI IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-43) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

## PERMIT UNIT REQUIREMENTS

1. Operator shall notify the District by letter or fax at least 48-hours in advance of the re-location of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Operator shall maintain records of compressor skid location and dates spent at each location and make such records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6]
4. IC engine shall be equipped with air/fuel ratio controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The permittee shall install and operate a nonresettable elapsed operating time meter. The time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
7. The permittee shall install and operate a nonresettable fuel flow meter. The fuel meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
8. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
9. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
10. Emissions from this IC engine shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) - 5 ppmv @ 15% O<sub>2</sub>, VOC - 25 ppmv @ 15% O<sub>2</sub>, CO - 56 ppmv @ 15% O<sub>2</sub>, PM<sub>10</sub> - 0.02 g/hp-hr, or SO<sub>x</sub> (as SO<sub>2</sub>) - 0.012 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
11. VOC fugitive emissions from the components in gas service associated with the compressor shall not exceed 0.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Permittee shall maintain accurate component count for compressor according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

13. The fuel consumption for this engine shall not exceed 114.2 MMscf per calendar year. Compliance with this limit may be shown by a record of the annual fuel usage. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The engine shall only burn natural gas with fuel gas sulfur concentration (as H<sub>2</sub>S) not exceeding 1.0 grains/100 dscf. [District Rule 2201] Federally Enforceable Through Title V Permit
15. If the IC engine is fired on PUC-regulated natural gas, the permittee shall retain on file, copies of all natural gas bills. [District Rule 2201] Federally Enforceable Through Title V Permit
16. If the engine is fired on any fuel gas other than PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, D4084, Double GC for H<sub>2</sub>S and mercaptans, or alternative test method with prior written approval from the APCO. [District Rule 2201] Federally Enforceable Through Title V Permit
17. If the engine is fired on any fuel gas other than PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Source testing to measure natural gas-combustion NO<sub>x</sub>, CO, and VOC emissions from this engine shall be conducted not less than once every 12 months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
19. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit
20. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
21. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; VOC - EPA Method 25A or 25B, or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702, 6.4] Federally Enforceable Through Title V Permit
22. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. NO<sub>x</sub>, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit
23. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
24. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1080] Federally Enforceable Through Title V Permit
25. This engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications and the Rule 4702 Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702, 6.5] Federally Enforceable Through Title V Permit
26. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702, 6.5.9] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

27. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit
28. If either the NO<sub>x</sub> or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702, 5.6.1] Federally Enforceable Through Title V Permit
29. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit
30. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub> CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
31. The results of the measurements taken with the District approved analyzer shall be retained on-site at all times. [District Rule 1070]
32. This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
33. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type, quantity (cubic feet of gas) and sulfur content of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702, 6.2.1] Federally Enforceable Through Title V Permit
34. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-2234-4-5

**EXPIRATION DATE:** 10/31/2009

**SECTION:** NE35 **TOWNSHIP:** 30S **RANGE:** 23E

**EQUIPMENT DESCRIPTION:**

NATURAL GASOLINE LOADOUT #2 INCLUDING A LOADING RACK WITH VAPOR RECOVERY SYSTEM

## PERMIT UNIT REQUIREMENTS

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1. Operation shall be equipped with two 15 hp product transfer pumps. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Loading rack shall incorporate vapor loss collection system. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Nitrogen purge system shall be a closed system such that all VOC's are displaced to the vapor control system via closed piping for reprocessing in S-2234-3. [District NSR Rule] Federally Enforceable Through Title V Permit
4. This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
5. The loading rack shall be equipped with bottom loading and a vapor collection and control system such that VOC emissions do not exceed 0.08 pounds per 1000 gallons of organic liquid with greatest vapor pressure loaded. [4624, 5.1.1 and Kern County Rule 413] Federally Enforceable Through Title V Permit
6. Vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and 6 inches water column vacuum. [District Rule 4624, 5.2 and Kern County Rule 413] Federally Enforceable Through Title V Permit
7. All delivery tanks which previously contained organic liquids, including gasoline, with a TVP greater than 1.5 psia at loading conditions shall be filled only at Class 1 loading facilities using bottom loading equipment with a vapor collection and control system operating such that VOC emissions do not exceed 0.08 lb/1000 gallons loaded; or Class 2 loading facilities equipped with a system to control at least 95% of VOC displaced; and which operate so the delivery tank does not exceed 18 inches water column pressure nor 6 inches water column vacuum. [District Rule 4624, 5.3 and Kern County Rule 413] Federally Enforceable Through Title V Permit
8. Loading and vapor collection and control equipment shall be designed, installed, maintained and operated such that there are no leaks or excess organic liquid drainage at disconnections. A leak shall be defined as the dripping of organic compounds at a rate of more than three drops per minute; or the detection of organic compounds in excess of 10,000 ppm above background of methane when measured at a distance of one centimeter from the potential source with a portable hydrocarbon detection instrument calibrated with methane. [District Rule 4624, 5.4 and Kern County Rule 413] Federally Enforceable Through Title V Permit
9. Construction, reconstruction (as defined in District Rule 4001, amended January 19, 1995), or expansion of any top loading facility shall not be allowed. [District Rule 4624, 5.5 and Kern County Rule 413] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

10. During the loading of organic liquids, the operator shall perform and record the results of monthly leak inspections of the loading and vapor collection equipment at each loading arm. Leak inspections shall be conducted using sight, sound, smell and instrument methods to detect leaks. Instrument detection shall be conducted using EPA Method 21 and shall be measured at a distance of one centimeter from the potential source. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: A) Zero air (less than 10 ppm of hydrocarbon in air); and B) Mixture of methane and air at a concentration of about, but less than, 10,000 ppm methane. [District Rules 2520, 9.3.2 and 4624, 6.2.2] Federally Enforceable Through Title V Permit
11. Corrective steps shall be taken at any time the operator observes excess drainage at disconnect. In addition, the operator shall perform and record the results of monthly drainage inspections at disconnect for each loading arm. If no excess drainage conditions are found during five consecutive monthly inspections, the drainage inspection frequency may be changed from monthly to quarterly. However, if one or more excess drainage condition is found during a quarterly inspection, the inspection frequency shall return to monthly. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. Drainage inspections shall be completed before 10:00 AM the day of inspection. Compliance shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one (1) minute of collection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. Each detected leak shall be repaired within 15 calendar days of detection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. The loading rack's vapor collection and control system (VCCS) shall be tested annually to demonstrate the pressure in the delivery tanks being loaded complies with the requirements specified in this permit. Compliance shall be determined by calibrating and installing a liquid manometer, magnehelic device, or other instrument demonstrated to be equivalent, capable of measuring up to 500 mm water gauge pressure with a precision of + or - 2.5 mm water gauge, on the terminal's VCCS at a pressure tap as close as possible to the connection with the product tank truck. The highest instantaneous pressure measurement as well as all pressure measurements at 5 minute intervals during delivery vessel loading must be recorded. Every loading position must be tested at least once during the annual performance test. [District Rules 2520, 9.4.2 and 4624, 6.2.2] Federally Enforceable Through Title V Permit
15. Analysis of halogenated exempt compounds shall be by ARB Method 432. [District Rule 4624, 6.2.1 and Kern County Rule 413] Federally Enforceable Through Title V Permit
16. The permittee shall maintain an inspection log containing at least the following: A) dates of leak and drainage inspections, B) leak determination method, C) findings, D) corrective action (date each leak or excess drainage condition repaired, reasons for any leak repair interval in excess of 15 days), and E) inspector name and signature. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
17. All records necessary to determine compliance with the VOC emission limit for this unit shall be maintained for a period of at least 5 years and shall include component counts and recognized emission factors for fugitive emission sources. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
18. Compliance with these permit conditions in the Title V permit shall be deemed compliance with the requirements of Kern County Rule 413. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
19. Compliance with these permit conditions in the Title V permit shall be deemed compliance with the following requirements: District Rule 4624 (as amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

Attachment B  
Authority to Construct



## AUTHORITY TO CONSTRUCT

**PERMIT NO:** S-2234-4-6

**ISSUANCE DATE:** 11/18/2005

**LEGAL OWNER OR OPERATOR:** OCCIDENTAL OF ELK HILLS INC  
**MAILING ADDRESS:** 10800 STOCKDALE HIGHWAY  
BAKERSFIELD, CA 93311

**LOCATION:** GAS PLANT  
SECTION SE-35, T-30S, R-23E  
TUPMAN, CA

**SECTION:** NE35 **TOWNSHIP:** 30S **RANGE:** 23E

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF NATURAL GASOLINE LOADOUT #2 INCLUDING A LOADING RACK WITH VAPOR RECOVERY SYSTEM: CLARIFY EQUIPMENT DESCRIPTION TO SPECIFY SPECIFIC EQUIPMENT

## CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. Operation shall be equipped with two 15 hp product transfer pumps. [District NSR Rule] Federally Enforceable Through Title V Permit
5. VOC emissions from the vapor collection and control system shall be determined using 40CFR 60.503. "Test Methods and Procedures" and EPA Reference Methods 2A, 2B, 25A and 25B and ARB Method 432, or ARB Method 2-4. After an initial compliance determination, determinations shall be made whenever an inspection reveals conditions indicative of performance less effective than that during previous compliance determinations. [District Rule 4624, 6.2.2] Federally Enforceable Through Title V Permit
6. Loading rack shall incorporate vapor loss collection system. [District NSR Rule] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

7. Nitrogen purge system shall be a closed system such that all VOC's are displaced to the vapor control system via closed piping for reprocessing in S-2234-3. [District NSR Rule] Federally Enforceable Through Title V Permit
8. The loading rack shall be equipped with bottom loading and a vapor collection and control system such that VOC emissions do not exceed 0.08 pounds per 1000 gallons of organic liquid with greatest vapor pressure loaded. [4624, 5.1.1 and Kern County Rule 413] Federally Enforceable Through Title V Permit
9. Vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and 6 inches water column vacuum. [District Rule 4624, 5.2] Federally Enforceable Through Title V Permit
10. All delivery tanks which previously contained organic liquids, including gasoline, with a TVP greater than 1.5 psia at loading conditions shall be filled only at Class 1 loading facilities using bottom loading equipment with a vapor collection and control system operating such that VOC emissions do not exceed 0.08 lb/1000 gallons loaded; or Class 2 loading facilities equipped with a system to control at least 95% of VOC displaced; and which operate so the delivery tank does not exceed 18 inches water column pressure nor 6 inches water column vacuum. [District Rule 4624, 5.3] Federally Enforceable Through Title V Permit
11. Loading and vapor collection and control equipment shall be designed, installed, maintained and operated such that there are no leaks or excess organic liquid drainage at disconnections. A leak shall be defined as the dripping of organic compounds at a rate of more than three drops per minute or the detection of organic compounds, in excess of 10,000 ppm as methane measured in accordance with EPA Method 21. Excess liquid drainage shall be defined as exceeding 10 mls per average of 3 consecutive disconnects. [District Rule 4624, 5.4 and Kern County Rule 413] Federally Enforceable Through Title V Permit
12. Construction, reconstruction (as defined in District Rule 4001, amended January 19, 1995), or expansion of any top loading facility shall not be allowed. [District Rule 4624, 5.5] Federally Enforceable Through Title V Permit
13. Analysis of halogenated exempt compounds shall be by ARB Method 432. [District Rule 4624, 6.2.1] Federally Enforceable Through Title V Permit
14. TVP shall be measured using Reid vapor pressure ASTM Method No. D-323-82 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100°F, TVP may be determined by Reid Vapor pressure at 100°F and ARB approved calculations. [District Rule 4624, 6.2.3] Federally Enforceable Through Title V Permit
15. TVP of crude oil with an API gravity less than 30° as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4624, 6.2.4] Federally Enforceable Through Title V Permit
16. During the loading of organic liquids, the operator shall perform and record the results of monthly leak inspections of the loading and vapor collection equipment at each loading arm. Leak inspections shall be conducted using sight, sound, smell and instrument methods to detect leaks. Instrument detection shall be conducted using EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: A) Zero air (less than 10 ppm of hydrocarbon in air); and B) Mixture of methane and air at a concentration of about, but less than, 10,000 ppm methane. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
17. Corrective steps shall be taken at any time the operator observes excess drainage at disconnect. In addition, the operator shall perform and record the results of monthly drainage inspections at disconnect for each loading arm. If no excess drainage conditions are found during five consecutive monthly inspections, the drainage inspection frequency may be changed from monthly to quarterly. However, if one or more excess drainage condition is found during a quarterly inspection, the inspection frequency shall return to monthly. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
18. Drainage inspections shall be completed before 10:00 AM the day of inspection. Compliance shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one (1) minute of collection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. Each detected leak shall be repaired within 15 calendar days of detection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
20. The permittee shall maintain an inspection log containing at least the following: A) dates of leak and drainage inspections, B) leak determination method, C) findings, D) corrective action (date each leak or excess drainage condition repaired, reasons for any leak repair interval in excess of 15 days), and E) inspector name and signature. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
21. All records necessary to determine compliance with the VOC emission limit for this unit shall be maintained for a period of at least 5 years and shall include component counts and recognized emission factors for fugitive emission sources. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
22. The loading rack's vapor collection and control system (VCCS) shall be tested annually to demonstrate the pressure in the delivery tanks being loaded complies with the requirements specified in this permit. Compliance shall be determined by calibrating and installing a liquid manometer, magnehelic device, or other instrument demonstrated to be equivalent, capable of measuring up to 500 mm water gauge pressure with a precision of + or - 2.5 mm water gauge, on the terminal's VCCS at a pressure tap as close as possible to the connection with the product tank truck. The highest instantaneous pressure measurement as well as all pressure measurements at 5 minute intervals during delivery vessel loading must be recorded. Every loading position must be tested at least once during the annual performance test. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. Compliance with these permit conditions in the Title V permit shall be deemed compliance with the requirements of Kern County Rule 413. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
24. Compliance with these permit conditions in the Title V permit shall be deemed compliance with the following requirements: District Rule 4624 (as amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit



## AUTHORITY TO CONSTRUCT

**PERMIT NO:** S-2234-195-0

**ISSUANCE DATE:** 10/11/2007

**LEGAL OWNER OR OPERATOR:** OCCIDENTAL OF ELK HILLS INC  
**MAILING ADDRESS:** 10800 STOCKDALE HIGHWAY  
BAKERSFIELD, CA 93311

**LOCATION:** GAS PLANT  
SECTION SE-35, T-30S, R-23E  
TUPMAN, CA

**SECTION:** 35 **TOWNSHIP:** 30S **RANGE:** 23E

**EQUIPMENT DESCRIPTION:**

METHANOL UNLOADING, STORAGE, AND LOADING OPERATION CONSISTING OF A 430 BBL STORAGE VESSEL CONTROLLED WITH A GAS BLANKET SYSTEM, AND AN UNLOADING RACK, LOADING RACK, AND METHANOL INJECTION PUMPS

## CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. Methanol received by the unloading operation shall be stored in the storage vessel until such time it is injected into the gas gathering system, or until such time it is loaded into tank trucks or trailers with a storage capacity of not less than 2,520 gallons. [District Rule 2201]
4. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components shall not exceed 0.27 lb/day. [District Rule 2201]
5. There shall be no leaks in excess of 10,000 ppmv from either fugitive components or the pressure relief valve on the tank trucks when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District Rules 2201 and 4623]

CONDITIONS CONTINUE ON NEXT PAGE

**YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT.** This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

6. The vapor space of the methanol storage vessel shall be vented to the gas gathering system. [District Rules 2201 and 4623]
7. Any gauging or sampling device on the methanol storage vessel shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623]
8. The methanol loading and unloading racks shall be designed, installed, maintained, and operated such that there are no leaks or excess organic liquid drainage at disconnections. [District Rule 2201]
9. Excess organic liquid drainage is defined as organic liquid drainage greater than 10 mL per disconnect. [District Rule 2201]
10. There shall be no more than 10 disconnects per day from loading and unloading operations combined. [District Rule 2201]
11. VOC emissions from disconnects shall not exceed 0.17 lb/day. [District Rule 2201]
12. Tank trucks or trailers receiving methanol from the loading rack shall be equipped with a pressure relief valve set to at least 35 psig positive pressure, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition. [District Rule 2201]
13. Tank trucks or trailers receiving methanol from the loading rack shall not contain more than 1,600 gallons of methanol when a loading operation is complete. [District Rule 2201]
14. The pressure relief valve on the tank trucks or trailers shall not vent during loading operations. [District Rule 2201]
15. No more than 4,000 gallons of methanol may be loaded into tank trucks or trailers in any one day. [District Rule 4624]
16. The operator shall maintain daily records of the quantity of liquid loaded into tank trucks or trailers, and the volume of liquid in each tank truck or trailer after each loading operation is completed. [District Rules 2201 and 4624]
17. Permittee shall maintain with the permit accurate fugitive component counts and resulting emissions. [District Rules 1070 and 2201]
18. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]



## AUTHORITY TO CONSTRUCT

**PERMIT NO:** S-2234-215-0

**ISSUANCE DATE:** 09/22/2010

**LEGAL OWNER OR OPERATOR:** OCCIDENTAL OF ELK HILLS INC  
**MAILING ADDRESS:** 10800 STOCKDALE HIGHWAY  
BAKERSFIELD, CA 93311

**LOCATION:** GAS PLANT  
SECTION SE-35, T-30S, R-23E  
TUPMAN, CA

**SECTION:** 29 **TOWNSHIP:** 30S **RANGE:** 23E

**EQUIPMENT DESCRIPTION:**

1,680 BHP NATURAL GAS-FIRED WAUKESHA MODEL L7044GSI IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-43) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234 (ROUTINE REPLACEMENT OF S-2234-189)

## CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Upon implementation of this Authority to Construct permit, Permit to Operate S-2234-189 shall be cancelled. [District Rule 2201]
3. Operator shall notify the District by letter or fax at least 48-hours in advance of the re-location of this unit. [District Rule 2201]
4. Operator shall maintain records of compressor skid location and dates spent at each location and make such records available for District inspection upon request. [District Rule 2201]
5. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6]
6. IC engine shall be equipped with air/fuel ratio controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201]
7. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

**YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT.** This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

8. The permittee shall install and operate a nonresettable elapsed operating time meter. The time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
9. The permittee shall install and operate a nonresettable fuel flow meter. The fuel meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 2201]
10. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
11. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
12. Emissions from this IC engine shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) - 5 ppmv @ 15% O<sub>2</sub>, VOC - 25 ppmv @ 15% O<sub>2</sub>, CO - 56 ppmv @ 15% O<sub>2</sub>, PM<sub>10</sub> - 0.02 g/hp-hr, or SO<sub>x</sub> (as SO<sub>2</sub>) - 0.012 g/hp-hr. [District Rules 2201 and 4702, 5.1]
13. VOC fugitive emissions from the components in gas service associated with the compressor shall not exceed 0.7 lb/day. [District Rule 2201]
14. Permittee shall maintain accurate component count for compressor according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201]
15. The fuel consumption for this engine shall not exceed 114.2 MMscf per calendar year. Compliance with this limit may be shown by a record of the annual fuel usage. [District Rule 2201]
16. The engine shall only burn natural gas with fuel gas sulfur concentration (as H<sub>2</sub>S) not exceeding 1.0 grains/100 dscf. [District Rule 2201]
17. If the IC engine is fired on PUC-regulated natural gas, the permittee shall retain on file, copies of all natural gas bills. [District Rule 2201]
18. If the engine is fired on any fuel gas other than PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, D4084, Double GC for H<sub>2</sub>S and mercaptans, or alternative test method with prior written approval from the APCO. [District Rule 2201]
19. If the engine is fired on any fuel gas other than PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201]
20. Source testing to measure natural gas-combustion NO<sub>x</sub>, CO, and VOC emissions from this engine shall be conducted within 60 days of initial startup. [District Rules 2201 and 4702]
21. Source testing to measure natural gas-combustion NO<sub>x</sub>, CO, and VOC emissions from this engine shall be conducted not less than once every 12 months. [District Rules 2201 and 4702]
22. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702, 6.3.3]
23. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
24. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; VOC - EPA Method 25A or 25B, or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702, 6.4]

CONDITIONS CONTINUE ON NEXT PAGE

25. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. NO<sub>x</sub>, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.3]
26. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080]
27. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1080]
28. This engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications and the Rule 4702 Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702, 6.5]
29. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702, 6.5.9]
30. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9]
31. If either the NO<sub>x</sub> or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702, 5.6.1]
32. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702, 5.6.1 and 5.6.9]
33. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.2.1]
34. The results of the measurements taken with the District approved analyzer shall be retained on-site at all times. [District Rule 1070]
35. This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409]

CONDITIONS CONTINUE ON NEXT PAGE

36. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type, quantity (cubic feet of gas) and sulfur content of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702, 6.2.1]
37. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2]

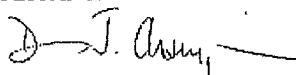
## Attachment C Application

# San Joaquin Valley Air Pollution Control District

[www.valleyair.org](http://www.valleyair.org)

## Permit Application For:

☐ ADMINISTRATIVE AMENDMENT    ☒ MINOR MODIFICATION    ☐ SIGNIFICANT MODIFICATION

1. PERMIT TO BE ISSUED TO: Occidental of Elk Hills, Inc	
2. MAILING ADDRESS:  STREET/P.O. BOX: 10800 Stockdale Hwy  CITY: Bakersfield STATE: CA 9-DIGIT ZIP CODE: 93311	
3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED:  STREET: Elk Hills CITY: Tupman  ¼ SECTION TOWNSHIP RANGE	INSTALLATION DATE:
4. GENERAL NATURE OF BUSINESS: Oil and Natural Gas Production	
5. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE (include Permit #'s if known, and use additional sheets if necessary) Incorporate following ATCs into S-2234 Title V document:  S-2234-4-6    S-2234-195-0    S-2234-215-0	
6. TYPE OR PRINT NAME OF APPLICANT: Dennis J. Champion, PE	TITLE OF APPLICANT: Sr Environmental Engineer
7. SIGNATURE OF APPLICANT: 	DATE: September 13, 2011  PHONE: (661) 412-5214 FAX: (661) 412-5270 EMAIL: dennis_champion@oxy.com

### For APCD Use Only:

DATE STAMP	FILING FEE RECEIVED: \$	CHECK#: _____
	DATE PAID: _____	
	PROJECT NO: _____	FACILITY ID: _____

**San Joaquin Valley  
Unified Air Pollution Control District**

RECEIVED  
**SEP - 1 2011**  
SJVAPCD  
Southern Region

**TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM**

**I. TYPE OF PERMIT ACTION (Check appropriate box)**

- ☐ SIGNIFICANT PERMIT MODIFICATION                      ☐ ADMINISTRATIVE AMENDMENT  
☒ MINOR PERMIT MODIFICATION

COMPANY NAME: Occidental of Elk Hills, Inc	FACILITY ID: S - 2234
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: Occidental of Elk Hills, Inc	
3. Agent to the Owner: Occidental of Elk Hills, Inc.	

**II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):**

- ☒ Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).
- ☒ Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- ☒ Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- ☒ Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:

  
\_\_\_\_\_  
Signature of Responsible Official

September 1, 2011  
\_\_\_\_\_  
Date

Mike Glavin  
\_\_\_\_\_  
Name of Responsible Official (please print)

Environmental Team Lead  
\_\_\_\_\_  
Title of Responsible Official (please print)